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AMENDMENTS TO THE CLAIMS:

Claims 68-139 are pending. Claims 78-85, 96-103, 114-121 and 132-239 are withdrawn from consideration. Claims 68, 74, 86, 92, 104, 110, 122 and 128 are amended.

Claims 1-67 (Canceled)

- 68. (Currently amended) A variant of a parent alpha-amylase enzyme, wherein said parent alpha-amylase has an amino acid sequence which has at least 80% homology to SEQ ID NO:3, and wherein said variant has at least 80% identity to said parent alpha-amylase and comprises deletions at positions equivalent to positions 180 and 181 in SEQ ID NO:3 (using SEQ ID NO:3 for numbering).
- 69. (Previously presented) The variant of claim 68, wherein said parent alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 70. (Previously presented) The variant of claim 68, wherein said parent alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.
- 71. (Previously presented) The variant of claim 68, wherein said parent alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.
- 72. (Previously presented) The variant of claim 68, wherein said variant further comprises amino acid substitutions of a cysteine at positions equivalent to positions 349 and 428 in SEQ ID NO:3.
- 73. (Previously presented) An isolated alpha-amylase enzyme comprising an amino acid sequence having an amino acid sequence which has at least 80% homology to SEQ ID NO:3, modified by having deletions at positions equivalent to positions 180 and 181 in SEQ ID NO:3.
- 74. (Currently amended) The alpha-amylase enzyme of claim 73, wherein said alpha-amylase enzyme is further modified by having amino acid substitutions of a systeme at positions equivalent to 349 and 428 in SEQ ID NO:3An isolated alpha-amylase comprising an

alpha-amylase of claim 73 having amino acid substitutions of cysteine at positions equivalent to 349 and 428 in SEQ ID NO:3.

- 75. (Previously presented) The alpha-amylase of claim 73, wherein said alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 76. (Previously presented) The alpha-amylase of claim 73, wherein said alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.
- 77. (Previously presented) The alpha-amylase of claim 73, wherein said alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.

Claims 78-85 (Withdrawn)

- 86. (Currently amended) A variant of a parent alpha-amylase enzyme, wherein said parent alpha-amylase has an amino acid sequence which has at least 80% homology to SEQ ID NO:3, and wherein said variant has at least 80% identity to said parent alpha-amylase and comprises deletions at positions equivalent to positions 179 and 181 in SEQ ID NO:3 (using SEQ ID NO:3 for numbering).
- 87. (Previously presented) The variant of claim 86, wherein said parent alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 88. (Previously presented) The variant of claim 86, wherein said parent alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.
- 89. (Previously presented) The variant of claim 86, wherein said parent alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.
- 90. (Previously presented) The variant of claim 86, wherein said variant further comprises amino acid substitutions of a cysteine at positions equivalent to positions 349 and 428 in SEQ ID NO:3.

- 91. (Previously presinted) An isolated alpha-amylas enzyme comprising an amino acid sequence having an amino acid sequence which has at least 80% homology to SEQ ID NO:3, modified by having deletions at positions equivalent to positions 179 and 181 in SEQ ID NO:3.
- 92. (Currently amended) The alpha amylase enzyme of claim 91, wherein said alpha amylase enzyme is further modified by having amino acid substitutions of a cysteine at positions equivalent to 349 and 428 in SEQ-ID-NO:3An isolated alpha-amylase comprising an alpha-amylase of claim 91 having amino acid substitutions of cysteine at positions equivalent to 349 and 428 in SEQ ID NO:3.
- 93. (Previously presented) The alpha-amylase of claim 91, wherein said alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 94. (Previously presented) The alpha-amylase of claim 91, wherein said alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.
- 95. (Previously presented) The alpha-amylase of claim 91, wherein said alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.

Claims 96-103 (Withdrawn)

- 104. (Currently amended) A variant of a parent alpha-amylase enzyme, wherein said parent alpha-amylase has an amino acid sequence which has at least 80% homology to SEQ ID NO:3, and wherein said variant has at least 80% identity to said parent alpha-amylase and comprises deletions at positions equivalent to positions 179 and 182 in SEQ ID NO:3 (using SEQ ID NO:3 for numbering).
- 105. (Previously presented) The variant of claim 104, wherein said parent alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 106. (Previously presented) The variant of claim 104, wherein said parent alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.

- 107. (Previously presented) The variant of claim 104, wherein said parent alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.
- 108. (Previously presented) The variant of claim 104, wherein said variant further comprises amino acid substitutions of a cysteine at positions equivalent to positions 349 and 428 in SEQ ID NO:3.
- 109. (Previously presented) An isolated alpha-amylase enzyme comprising an amino acid sequence having an amino acid sequence which has at least 80% homology to SEQ ID NO:3, modified by having deletions at positions equivalent to positions 179 and 182 in SEQ ID NO:3.
- 110. (Currently amended) The alpha-amylase enzyme of claim 109, wherein-said alpha-amylase enzyme is further modified by having amino acid substitutions of a cysteine at positions equivalent to 349 and 428 in SEQ ID NO:3An isolated alpha-amylase comprising an alpha-amylase of claim 109 having amino acid substitutions of cysteine at positions equivalent to 349 and 428 in SEQ ID NO:3.
- 111. (Previously presented) The alpha-amylase of claim 109, wherein said alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 112. (Previously presented) The alpha-amylase of claim 109, wherein said alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.
- 113. (Previously presented) The alpha-amylase of claim 109, wherein said alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.

Claims 114-121 (Withdrawn)

122. (Currently amended) A variant of a parent alpha-amylase enzyme, wherein said parent alpha-amylase has an amino acid sequence which has at least 80% homology to SEQ ID NO:3, and wherein said variant has at least 80% identity to said parent alpha-amylase and comprises deletions at positions equivalent to positions 180 and 182 in SEQ ID NO:3 (using SEQ ID NO:3 for numbering).

- 123. (Previously presented) The variant of claim 122, wherein said parent alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 124. (Previously presented) The variant of claim 122, wherein said parent alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.
- 125. (Previously presented) The variant of claim 122, wherein said parent alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.
- 126. (Previously presented) The variant of claim 122, wherein said variant further comprises amino acid substitutions of a cysteine at positions equivalent to positions 349 and 428 in SEQ ID NO:3.
- 127. (Previously presented) An isolated alpha-amylase enzyme comprising an amino acid sequence having an amino acid sequence which has at least 80% homology to SEQ ID NO:3, modified by having deletions at positions equivalent to positions 180 and 182 in SEQ ID NO:3.
- 128. (Currently amended) The alpha amylase enzyme of claim 127, wherein said alpha amylase enzyme is further modified by having amine acid substitutions of a systeme at positions equivalent to 349 and 428 in SEQ ID NO:3 An isolated alpha-amylase comprising an alpha-amylase of claim 127 having amine acid substitutions of cysteine at positions equivalent to 349 and 428 in SEQ ID NO:3.
- 129. (Previously presented) The alpha-amylase of claim 127, wherein said alpha-amylase has an amino acid sequence which has at least 85% homology to SEQ ID NO:3.
- 130. (Previously presented) The alpha-amylase of claim 127, wherein said alpha-amylase has an amino acid sequence which has at least 90% homology to SEQ ID NO:3.
- 131. (Previously presented) The alpha-amylase of claim 127, wherein said alpha-amylase has an amino acid sequence which has at least 95% homology to SEQ ID NO:3.

Claims 132-139. (Withdrawn)